

**Notice of Allowability**

Application No.

09/484,612

Applicant(s)

ZANG ET AL.

Examiner

Art Unit

Emmanuel Bayard

2638

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 9/6/05.
2. ☒ The allowed claim(s) is/are 1-59.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

This is in response to amendments and RCE filed on 9/6/05 in which claims 1-59 are pending. The applicant's amendments and RCE have been fully considered therefore this case is in condition for allowance. In addition the pending claims have been renumbered as 1-6, 15-16, 7-9, 17, 10, 18, 11-13, 19-22, 24, 23, 25-29, 32, 30-31, 33, 14, 34-36, 38, 37, 39-43, 49, 44, 50, 45-48, 51-53, 57, 54-56, 58-59, respectively.

### ***Allowable Subject Matter***

1. The following is an examiner's statement of reasons for allowance: the prior arts of record fail to anticipate or render obvious the following recited features: Receiving the information about the status of the group of cable modems from the working CMTS to thereby synchronize the protecting CMTS to the working CMTS in response to a change configuration data pertaining to the group of cable modems associated with the working CMTS as recited in claims 1, 18, 25, 34, 39, 44, 51, 54 and 58. Receiving the information about the status of the group of cable modems from the working CMTS to thereby synchronize the protecting CMTS to the working CMTS wherein the protecting CMTS provides downstream messages to the group cable modems on the same downstream channel as used by the working CMTS to provide service to the group of cable modems as recited in claim 8. Receiving the information about the status of the group of cable modems from the working CMTS to thereby synchronize the protecting CMTS to the working CMTS wherein determining that the working CMTS is not responding comprises receiving no acknowledgement of an Hello message within a

predefined time after the hello message was sent from the protecting to the working CMTSs as recited in claim 12. Receiving the information about the status of the group of cable modems from the working CMTS to thereby synchronize the protecting CMTS to the working CMTS wherein determining that the protecting CMTS is to take over service to the group of cable modems comprises receiving notification from a network node that a downstream signal from the working CMTS is no longer being received as recited in claims 14, 46. Wherein at least one of the processors and the memory are configured or desired to receive and store synchronization data from the working CMTS, the synchronization data specifying information about the group of cable modems, and wherein at least one of the processor and the memory are configured or designed to periodically send HELLO messages to the working CMTS to confirm that the working CMTS is operating as recited in claims 22, 37. Wherein at least one of the processors and the memory are configured or designed to receive and store synchronization data from the working CMTS, the synchronization data specifying information about the group of cable modems, and wherein at least one of the processors and the memory are configured or desired to service the group of cable modems using a downstream frequency that is identical to a downstream frequency used by the working CMTS as recited in claims 24, 29. Receiving the information about the status of the group of cable modems from the working CMTS to thereby synchronize the protecting CMTS to the working CMTS wherein the instructions for determining that the protecting CMTS is to take over service to the group of cable modems comprises instruction for determining

that the working CMTS is not responding to the protecting CMTS or is not providing signals to a network node on the cable network as recited in claims 32

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM)  
Alternate Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vanderpuye Kenneth can be reached on 571 272 3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Bayard  
Primary Examiner  
Art Unit 2638

11/16/05

  
**EMMANUEL BAYARD**  
**PRIMARY EXAMINER**